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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
ALI, SHUMAYA B	
ART UNIT	**PAPER NUMBER**
3771	

MAIL DATE	DELIVERY MODE
09/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/777,448	CHILDERS, WINTHROP D.	
	Examiner	Art Unit	
	Shumaya B. Ali	3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,19,21 and 32-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,19,21,32,33,35-37* is/are rejected.

7)☒ Claim(s) *34,38 and 39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

In response to the office action dated 3/26/07, no changes to the claims are filed. Currently, claims 1-14, 19,21,32-39 are pending and claims 15-19,20, and 22-31 were previously cancelled.

Claim Objections

Claim 9 objected to because of the following informalities: in line 1, "the sensor" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,6-14,19, 32,33, and 35-37, rejected under 35 U.S.C. 102(b) as being anticipated by Cox US 6,234,167 B1.

As to claim 1, Cox (in fig.1) discloses a medicament dispenser, comprising: a fluid medicament supply (23); an ejector (53); an accumulator (37) in fluid communication with the ejector; a valve (35) in fluid communication with the fluid medicament supply and the accumulator, a sensor (48) configured to sense an accumulator characteristic; and a controller (43) configured to operate the valve in response to the accumulator characteristic.

As to claim 2, Cox discloses a pressure sensor (48), thus the sensor is configured to sense fluid pressure within the accumulator.

As to claim 3, since pressure sensor (48) sense the pressure of gas (see col.5, lines 27 and 28) and there is a direct relationship between the volume and pressure of a gas, Cox's pressure sensor inherently capable of sensing a volume defined by the accumulator.

As to claim 4, Cox discloses the dispenser of claim 1, wherein the sensor is fluidically coupled to the accumulator (see fig.1).

As to claim 6, Cox discloses the dispenser of claim 1, further comprising a compliant member (fig.2, 48) that regulates pressure within the accumulator.

As to claim 7, Cox discloses the dispenser of claim 6, wherein the compliant member is configured to regulate pressure by deforming elastically in response to changes in accumulator pressure (col.5, lines 26-41).

As to claim 8, the compliant member is a pressure sensor (see fig.2), therefore, inherently capable of regulating negative accumulator pressure.

As to claim 9, Cox discloses the dispenser of claim 7, wherein the sensor is coupled to the compliant member to sense the accumulator volume.

As to claim 10, Cox discloses the dispenser of claim 1, wherein the valve includes a micro valve (col.3, lines 3).

As to claim 11, Cox teaches a battery powered (fig.1, 41) controller (fig.1, 43) the valve is actuated by the magnetic power of the battery, Cox thus discloses wherein the micro valve includes a magnetic actuator.

As to claim 12, Cox discloses the dispenser of claim 1, further comprising a display (fig.2, 65) configured to provide information to a user of the dispenser.

As to claim 13, Cox discloses the dispenser of claim 12, wherein the information includes the number of doses of medicament remaining in the dispenser (col.7, lines 46-55).

As to claim 14, Cox discloses the dispenser of claim 12, wherein the information includes an indication (fig.2, 63) to replace the fluid medicament supply.

As to claim 19, Cox, discloses a method of dispensing a medicament using a medicament dispenser (see fig.1 and 2) including a fluid medicament supply (23), an ejector (53), an accumulator (37) in fluid communication with the ejector (see fig.1), a valve (35) in fluid communication with the fluid medicament supply and the accumulator (see fig.1), a sensor (48) configured to sense an accumulator characteristic, and a controller (43) configured to operate the valve in response to the accumulator characteristic.

As to claim 32, Cox discloses an inhaler (fig.1 and 2), comprising: a fluid medicament supply means (23); an ejector means (53); an accumulator means (37) in fluid communication with the ejector means; a valve (35) means in fluid communication with the fluid medicament supply means and the accumulator means; a sensing means (48) configured to sense a characteristic of the accumulator means; and a controller (43) means configured to operate the valve means in response to the sensed accumulator characteristic.

As to claim 33, the inhaler of claim 32, further comprising a compliant regulating means (57,51) configured to regulate pressure within the accumulator means,

As to claim 35, Cox discloses the pressure regulator of claim 5, wherein the controller inherently capable of operating the valve to increase the pressure adjacent the ejector.

As to claim 36, Cox discloses the method of claim 21, further comprising sensing a second medicament pressure (via 57,48) within the accumulator and comparing the second pressure to a desired pressure.

As to claim 37, Cox discloses the method of claim 36, where the second pressure is less than the desired pressure, further comprising generating a notification (65) that the fluid medicament supply should be renewed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cox US 6,234,167 in view of Poole US 6,158,431.

As to claim 5, Cox lacks wherein the sensor is configured to sense pressure adjacent the ejector. However, Poole in a handheld therapeutic material teaches a pressure sensor (144)

adjacent an ejector (120) of an accumulator (18) (see col.9, lines 1-6). Therefore, it would have been obvious to change the location of Cox's sensor since it is known in the art as taught by Poole.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cox US 6,234,167.

As to claim 21, Cox lacks the detailed method steps; however, Cox teaches sensors 48 and 57, which is capable of sensing pressure. Thus, it would have been obvious to one of ordinary sill in the art at the to compare the sensed pressure to a minimum acceptable medicament pressure within the accumulator using Cox's sensor.

Response to Arguments

Applicant's arguments with respect to claim 1-14, 19,21, and 32-39 have been considered, but a newly found reference to Cox as applied above considered to read on the claims.

Terminal Disclaimer

The terminal disclaimer filed on 6/26/07 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/777,449 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 34, 38,19, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schuler (2005/0051162A1) pertain to inhaler.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-W-F 8:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/4/04

Shumaya B. Ali
Examiner
Art Unit 3771

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9/4/07